Ryan Morton

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Summary

~ 13 years with data, image, and text processing for reports, apps, software libraries, and scripts
~ Designs data visualization software and automated systems for discovery, prediction/classification, and reporting
~ Always learning

"The information that's stored in our databases and spreadsheets cannot speak for itself. It has important stories to tell and only we can give them a voice. Once we've discovered the stories, telling them in an effective and compelling manner requires skills that most of us have never learned. Statistical narrative—that is, telling the stories that reside within quantitative information—is essentially like storytelling of all types; it boils down to communication." Stephen Few

Experience

Principal Data Scientist/Engineer and Owner

Morton Analytics LLC

2014 - Present (7 years 1 month +)
Data Science and Analytics, business consultant and software engineer for:
-machine learning (Keras/TensorFlow, natural language process, linear regression, classification trees),
-large and/or disparate data sets, performance metrics, forecasting,
-open source statistical programming (R and Python),
-open source plotting software development (D3.js),
-tabular data (SQL), spatial/GIS analysis (geoJSON), image processing, and natural language processing.

Recent Contracts/projects:
-prediction and clustering models for online ordering behavior
-prediction of commodities trading prices and transportation costs
-classifying Common Crawler web pages using a random forest classifier
-a full stack data science as a service Shiny app for marketing survey analysis
-predictive modeling for online subscription service based on web data, operationalized in Python;
-R Shiny App and custom d3.js data visualization library for orthodontics marketing app;
-R Shiny App and custom d3.js data visualization library that displays flu data via an API;
-R Shiny App and custom d3.js data visualization library for a juvenile justice program;
-D3.js based data visualization library extended through R for an open source project.

Morton Analytics utilizes open source statistical programming customized to meet your needs without high cost software licenses.

Let me create a solution that you can use and understand - a solution to help you improve and grow your business!

Analyst
DataSmart Solutions, LLC

Jul 2016 - Oct 2018 (2 years 4 months)

Health care data analytics solutions via JavaScript, R, and SQL for businesses looking to manage their health plans with better data analytics and data science.

-Research and Development
-Statistical Programming: R, RMarkdown, R Shiny
-Modeling efforts generally include: linear regression, natural language processing, deep learning (TensorFlow/Keras), and random forest
-Data Wrangling
-Weekly Data QA to secure analytics scoring for clients

Performance Milestones
- Produced parameterized reporting software in R, SQL, and d3.js to reduce manual processing from 2-3 days to 2-3 minutes per document;
- Developed d3.js based data visualization libraries for client and DSS with relevant branding, browser behavior, and extended through R as libraries;
- Created 4 R Shiny apps plus SQL for internal staff use to review data and remove manual processing;
- Prototyped 3 client facing web apps using R Shiny;
- Scoped and mentored 5 student projects involving big data students from the University of Montana;
- Delivered conference presentation on value-based contracting via specialty drug infusion therapy case study.

Analyst
Montana Department of Justice

Jan 2010 - Jan 2014 (4 years 1 month)

For Workers' Compensation and Unemployment Insurance:
-Performance Metrics for a bureau wide claims processing center
-Operations Analysis for program outcome measures
-Research and Analysis for 3 annual reports and benefit delivery study
-Wrote hundreds of SQL queries for QA of data aggregation from insurance carriers and TPAs
-Project Management
-Event Planning

Director Government Affairs
Missoula Building Industry Association

May 2008 - Aug 2009 (1 year 4 months)

For the Government Affairs Committee I provided:
-Strategic Planning
-Public Policy Research, Quantitative and Qualitative
-Public and Media Relations
-Community Organizing
-Event Planning

Public Policy topics included: affordable housing, city zoning regulations, county subdivision regulations, impact fees, agricultural preservation, parkland dedication regulations, forest fire mitigation regulations for housing, and accessory dwelling units.

Education

University of Montana
Bachelor's degree, Economics

Licenses & Certifications

Getting and Cleaning Data - Coursera Course Certificates
GYTPAH2DJY9N

The Data Scientist's Toolbox - Coursera Course Certificates
J6VQBSU9NQ

R Programming - Coursera Course Certificates
RZTHA46E9E

Exploratory Data Analysis - Coursera Course Certificates

Data Science Specialization - Coursera
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Skills

Analysis • Public Policy • Analytics • Research • Project Management • Key Performance Indicators • Statistics • Consulting • Data Analysis • Economics